

CLAIMS

What is claimed is:

Sects A1

1 1. A method comprising:
2 identifying a bitrate template associated with multimedia content; and
3 transmitting said multimedia content at a particular bitrate to a
4 multimedia node, said particular bitrate based on bitrate data in said bitrate
5 template.

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1 2. The method as in claim 1 wherein identifying comprises:
2 locating said bitrate template in a database using multimedia content
3 identification data.

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1 3. The method as in claim 2 wherein said identification data is a serial
2 number associated with said multimedia content.

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1 4. The method as in claim 2 wherein said identification data is a
2 checksum of a known unique portion of said multimedia content.

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1 5. The method as in claim 2 wherein said database is maintained on a
2 remote server.

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1 6. The method as in claim 1 further comprising:
2 filling an input buffer at said multimedia node by a particular amount in
3 anticipation of a bitrate spike indicated in said bitrate template.

1 7. The method as in claim 6 wherein filling said input buffer comprises
2 increasing said particular bitrate to a second, higher bitrate.

1 8. A method for providing efficient bandwidth allocation on a
2 bandwidth-limited network comprising:

3 receiving a request for multimedia content from a first multimedia node;
4 allocating a first amount of bandwidth to supply said multimedia content
5 to said multimedia node; and

6 dynamically adjusting said first amount of bandwidth based on a template
7 of bitrate data indicating changes in bitrate requirements of said multimedia
8 content.

1 9. The method as in claim 8 wherein said template is retrieved from a
2 bitrate database.

1 10. The method as in claim 9 wherein said template is identified in said
2 template database using identification data associated with said multimedia
3 content.

1 11. The method as in claim 10 wherein said identification data is a serial
2 number associated with said multimedia content.

1 12. The method as in claim 8 further comprising:
2 dynamically adjusting said first amount of bandwidth based on a template
3 of bitrate data indicating changes in bitrate requirements of multimedia content
4 requested by a second multimedia node.

1 13. The method as in claim 8 wherein said multimedia content is a digital
2 video disk ("DVD").

1 14. The method as in claim 8 wherein said first amount of bandwidth is
2 dynamically adjusted upward to fill a buffer at said first multimedia node by a
3 particular amount in anticipation of an increase in bitrate requirements for said
4 multimedia content.

1 15. The method as in claim 12 wherein said first amount of bandwidth is
2 dynamically adjusted upward to fill a buffer at said first multimedia node by a
3 particular amount in anticipation of an increase in bitrate requirements for
4 multimedia content transmitted to said second multimedia node.

1 16. The method as in claim 8 wherein said first amount of bandwidth is
2 maintained until a buffer at said first multimedia node is filled with said
3 multimedia content.

1 17. The method as in claim 16 wherein said first amount of bandwidth is
2 maintained until another multimedia node requires additional bandwidth.

1 18. A system comprising:
2 home media server configured to allocate a first amount of bandwidth to
3 supply multimedia content to a first multimedia node and to dynamically adjust
4 said first amount of bandwidth based on a template of bitrate data indicating
5 changes in bitrate requirements of multimedia content.

1 19. The system as in claim 18 wherein said home media server retrieves
2 said template based on identification data associated with said multimedia
3 content.

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1 20. The system as in claim 19 wherein said identification data is a serial
2 number associated with said multimedia content.

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1 21. The system as in claim 18 wherein said home media server is further
2 configured to:

3 dynamically adjust said first amount of bandwidth based on a template of
4 bitrate data indicating changes in bitrate requirements of multimedia content
5 requested by a second multimedia node.

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1 22. The system as in claim 18 wherein said multimedia content is a digital
2 video disk ("DVD").

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1 23. The system as in claim 18 wherein said home media server is further
2 configured to dynamically adjust said first amount of bandwidth upward to fill a
3 buffer at said first multimedia node by a particular amount in anticipation of an
4 increase in bitrate requirements for said multimedia content.

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1 24. The system as in claim 18 wherein said home media server is further
2 configured to dynamically adjust said first amount of bandwidth upward to fill a
3 buffer at said first multimedia node by a particular amount in anticipation of an
4 increase in bitrate requirements for multimedia content transmitted to a second
5 multimedia node.

1 25. The system as in claim 18 wherein said home media server is further
2 configured to maintain said first amount of bandwidth until a buffer at said first
3 multimedia node is filled with said multimedia content.

1 26. The system as in claim 18 wherein said home media server is further
2 configured to maintain said first amount of bandwidth until another multimedia
3 node requires additional bandwidth.

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